

WHAT IS CLAIMED IS:

1. A device for charging a battery of a tire pressure sensor within a tire, comprising:
an electrical power source; and
an electrode adapted to be coupled to a valve stem of the tire and configured to supply power from the electrical power source to the valve stem for charging the battery.
2. A device for charging a battery of a tire pressure sensor within a tire, comprising:
an electrical power source;
an electrode adapted to be coupled to a valve stem of the tire; and
a switch configured for selectively supplying power from the electrical power source to the electrode for charging the battery.
3. A device according to claim 2, further comprising:
a meter;
wherein the switch is further configured for selectively coupling the electrode to the meter for measuring an electrical parameter at the electrode.
4. A device according to claim 3, further comprising:
a display device configured for indicating a life of the battery based on a measurement of the electrical parameter.
5. A device according to claim 3, wherein:
the meter includes a voltmeter for measuring a potential at the electrode or an ammeter for measuring a current drawn from the electrode.

6. A device according to claim 2, further comprising:
an air supply nozzle adapted to supply air to the valve stem.
7. The device according to claim 7, further comprising:
an air pressure sensor adapted to measure air pressure at the air supply nozzle; and
a display device indicating a measured air pressure.
8. A device for charging a battery of a tire pressure sensor within a tire, comprising:
an electrical power source;
a nozzle having an electrode adapted to be coupled to a valve stem of the tire;
a meter;
a switch configured for selectively supplying power from the electrical power source to the
electrode for charging the battery or coupling the meter to the electrode for measuring an
electrical parameter; and
a display for indicating a life of the battery based on a measurement of the electrical
parameter.
9. A device according to claim 8, further comprising:
an air supply for supply air to a valve stem of a tire via the nozzle.
10. A method for charging a battery of a tire pressure sensor disposed in a tire, comprising:
applying an electrode to a valve stem of the tire; and
supplying electrical power the electrode for charging the battery.
11. A method for maintaining a battery of a tire pressure sensor disposed in a tire, using a
device having a switch and an electrode, comprising:
with the switch in a first position, performing the steps of:
applying the electrode to a valve stem of the tire; and

reading an indication of a life of the battery; and
with the switch in a second position, performing the steps of:
applying the electrode to the valve stem; and
supplying electrical power the electrode for charging the battery.

12. A method according to claim 11, further comprising:
applying an air supply nozzle containing the electrode to the value stem; and
supplying air to the valve stem of the tire.

13. A tire pressure sensor system, comprising:
a tire pressure sensor;
a rechargeable battery coupled to the tire pressure sensor; and
a valve stem assembly including a pair of electrodes; said electrodes coupled to the
rechargeable battery for accepting electrical power for recharging the rechargeable
battery.

14. A tire pressure sensor system according to claim 13, wherein:
one of the electrodes is adapted to be coupled to a plunger of a valve stem, and
the other of the electrodes is adapted to be coupled to a threaded connector of the valve stem.

15. A tire pressure sensor system according to claim 13, further comprising:
a centrifugal switch coupled to the tire pressure sensor.

16. A tire pressure sensor system according to claim 15, wherein:
the electrodes are coupled between the centrifugal switch and the rechargeable battery.

17. The valve stem assembly according to claim 13, wherein:
the valve stem assembly is assembled into a valve stem.

18. A method for replacing a valve stem, comprising:
disconnecting an electrode of the valve stem from a lead coupled to a terminal of the battery;
replacing the valve stem; and
connecting an electrode of the replaced valve stem with the lead coupled to a terminal of the
battery.